#### "FOUR HUNDRED UP"

THE GOULD PETREL (<u>Pterodroma leucoptera</u>) ON CABBAGE TREE ISLAND, N.S.W.

A.F.D'Ombrain, Maitland. N.S.W.

Cabbage Tree Island and the White-winged, or Gould Petrel, are so well known now that it is scarcely worth while giving any lengthy details about them in this short article.

Cabbage Tree Island is the most northerly of the three islands opposite Port Stephens heads and should not be confused with a so-called Cabbage Tree Island some miles up in the Bay. This latter island is often thought to be the one on which the petrels nest, but the name is purely a local one and the island is mainly inhabited by Nankeen Night Herons.

My interest in Cabbage Tree Island dates back well before I came to live in Maitland in 1929, and I have been visiting it since 1930.

The years leading up to the second world war were mostly devoted to a general study of the birdlife of the Island and I did not start banding the Gould Petrel until 1948 using Victorian Fisheries and Game bands.

In 1957 I changed over to the C.S.I.R.O. bands and on 15.3.64 in company with my friend Albert Gwynne - who has been with me on most of my trips - we put on the 400th band.

This may not seem anything out of the ordinary to many banders who can round up that many terms or gulls in a day and band them, but to get the Petrels very many difficulties have to be overcome.

Not the least of these is getting away at 2 a.m. to drive the 50 miles to Port Stephens to board an early departing seine trawler, or a friend's launch. Sometimes it is too rough to land and the rest of the day must be spent at sea, although I must admit that many years local knowledge of weather conditions, gained as a boat owner and game fisherman, has helped minimise this happening.

Banding adult birds can only be carried out during the pre-egg laying period, in early November, or during the brooding period.

As the colony is only a small one, I do not like disturbing the birds while sitting, as they may desert if upset

too much by handling.

Banding young can be done in late January, or early February but if left until the middle of March, the job is made extremely difficult by thousands of dry Cabbage-tree palm fronds which carpet the whole rocky area under which the birds nest.

The whole place takes on quite a different appearance and nests previously known to exist cannot be found with any degree of accuracy. I do not mark nests with stakes as this would make them too easily found by intruders - not that there is much chance of that - but these birds mean so much to us that we do not make their nesting sites 'publicly known'.

Nests are marked however with painted strips of wood, which are placed inside the nest itself, so we have to find each nest again every year more or less by memory, and a certain amount of what has developed into rather uncanny instinct. It is surprising how certain areas become fixed in our memory, and we can even remember the number of the bird we are likely to find.

Most of the young birds are well advanced by the middle of March but do not, as a rule, have the primary feathers well developed.

On November 25, 1950, Albert and I found many birds sitting on the single egg which constitutes the clutch, and all eggs looked fresh.

The earliest record was in October, 1947, when we found birds present on the 6th. However I have since discovered that they come in and clean out the nests, in the same fashion as the shearwaters, before returning to sea for a period of possibly two to three weeks.

Egg laying is commenced towards the end of the third week in November and appears to extend from the 18th November to the 10th December, with late stragglers laying later on in the month.

The latest record for fully-fledged young was on May 10 1948, when Albert and I with Keith Hindwood visited the Island.

There are two main nesting areas, although the birds do nest at many spots on the western side of the Island.

I have always referred to these two spots as South Gully,

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a slight gully-like depression extending to the near top of the Island immediately above the southern landing strip, and North Gully which is a similar type of re-entrant at the northern end.

The latter is very much rougher with a great mass of bare stones and very little palm covering compared to South Gully.

It is very difficult to locate birds under all this "quarry" of rubble, and often when we do, it means shifting a number of boulders before getting to them.

At times they become annoyed or scared at our noisy clambering over the stones and the familiar Tee-tee-tee call comes echoing up from in front or behind. You would think this was a sure give away for the nesting site, but for sheer exasperation I have yet to find anything to beat this ventriloquial act.

We have found that this mostly occurs when two birds are together, which is quite common, but in most of these cases they are not nesting but just parked for the day. I would not be surprised if some of them rest there for several days, as on one occasion I found two birds together and a week later found the same two still there.

Dead birds are found every season, the main cause of death being predators in the form of Sea Eagles, Peregrine Falcons, Owls and possibly Ravens, and birds becoming gummed up from the sticky Pisonia tree seeds. These completely incapacitate them and they die of starvation or exhaustion. While the number is not great, we do not like to find any dead birds in this small colony.

#### STATISTICS ON BANDING.

		ADULTS	YOUNG	TOTAL.
Birds Banded F & G	1948-1956	79	53	132
Birds Banded C.S.I.R.O.	1957-1964	207	61	268
		286	114	400

# RECOVERIES.

DATE OF

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NUMBER	BANDING	RECOVERY	
F & G 955 F & G 963 F & G 96 F & G 97	31.12.49 31.12.56	25. 11.50 29. 12.57	
C.S.I.R.O.Ban	ds 060-		
04307 04302 04315 04339 04347	29.12.57	29.12.59 9.1.60 26.12.58	21.12.59 11.12.60 (band changed to 10725. Damaged)
04350 04314 04308 10806	30.12.61	28.1.62 30.12.62	11.12.60 28.12.62 13.1.63
10812 04380 04384 04395	26.12.58	21.12.59	
06951 + 10720 10719	21.12.59 9.1.60	11.12.60 30.12.61 11.12.60	28.1.62 29.12.63
10729 10772	30.10,60	26.12.60 11.12.60	30.12.61 30.12.62
10781 10786 10811	11. 12.60 " 30. 12.61	28.1.62 29.1.61 28.1.62	(Found dead) 30.12.62
04398 10790 10710 10846 10810 10725	9.1.60 11.12.60 21.12.59 30.12.62 30.12.61 21.12.59	26.12.60 29.1.62	30.12.61

Total of 31 Recoveries.

+ 1 of 21 birds banded by S.G.Lane.

Oldest Recovery 060-04350 5 years, found 4 times.

#### WEAR ON BANDS.

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Although band number 04347 was changed this was not really necessary as later examination proved. It was at first thought that the band had a crack in it, and an anxious boatman calling to us did not help matters for a closer examination. One year's wear showed no real sign of deterioration and it could have gone on for another few years.

These bands are quite thick enough to stand up to five years wear without any trouble, and although they appear to be aluminium no great action is noticed by the salt water. Monel bands would probably be better, and I believe the later bands are of this material.

The birds do not dig like the Shearwaters and this prevents damage to light aluminium bands.

# SIZE OF THE COLONY AND THE POSSIBLE OUTLOOK FOR EXISTENCE.

Working only the two main gullies does not offer any true picture of the size of the colony on Cabbage Tree, and I consider the number far in excess of what we conservatively estimate.

Even taking that into consideration it cannot be considered a large nesting colony as compared to the masses of Noddies and Gannets found on cays on the Barrier Reef, and if this is the only nesting ground of this species - a theory I have long found hard to believe - it cannot be more than just holding its own.

The fact that after sixteen years, no young bird has yet come back with a band on - and yet we continue to band new birds every year - makes me believe that these birds may be coming in from some other area.

Allowing for the time lapse of a young bird to reach breeding age, possibly four or five years, I would have expected some of the F & G birds to have been found. As against this the thin aluminium bands in use then may have worn off, and that would leave the C.S.I.R.O. birds the only likely ones to return. As the recovery percentage of adults banded with C.S.I.R.O. bands is only 13%, 27 out of 207 birds, it may be expecting too much to hope for recoveries from the 61 young birds marked. Possibly the next two or three years may provide the answer.

### CONDITION OF BIRDS.

The birds arrive back in remarkably good condition and are mostly extremely fat and with hardly a feather out of place.

Some have been captured however with tail and wing feathers so worn, that the impression is gained that they may have had a severe buffeting, possibly in cyclonic conditions.

There is a marked difference in the size of the body of an old bird to that of a young one just about ready to leave the nest. A young bird can be held in one hand quite easily but the big expanse of the breast can be noticed when holding an adult which has just arrived at the nesting ground in October.

### OTHER ISLANDS AS NESTING PLACES.

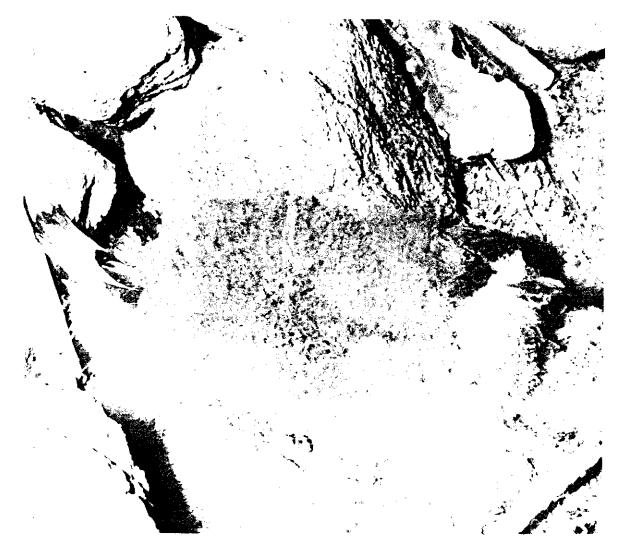
Nearby Boondelbah and Little Islands have been visited, and while the latter is only an occasional nesting place for terns and gulls, the former is covered with heavy rush and grass but no trees. No sign of the petrels has been seen here nor has any sign been found of them on many landings on Broughton Island, and adjoining small islands.

Possibly the birds like the shelter of the palms and general conditions under the stones which they would not get on most other islands.

After visiting Cabbage Tree Island for 34 years I think I have been very lucky to have had such a long association with it and the birds, but before I hand over the banding to someone younger, I would like to see this Number I Faunal Reserve, have a suitable tablet erected there to commemorate John Gould, and with this in view I made a special trip with Mr. Pat Bourke recently to get a good photo of an adult petrel which could be used on such a tablet.

By a strange coincidence a bird banded by us on 15.3.64 was the young of the bird previously photographed. An amusing sidelight to this was what I would call a hereditary trait showing up in the progeny of the old bird.

When we photographed the old bird, it was found dozing under a big rock which was lifted away for the photo.



Gould Petrel Fledgling aged about 9 weeks.

Photo: A.F.D'Ombrain.

The job took 2C minutes and we made over a dozen exposures using flash on all of them. The long-suffering bird sat through the ordeal and made no effort to move.

Similarly we had to wake up the young hird, which had its head so firmly tucked into its back that we thought it was dead.

Only after slight provocation with a stick did it sit up and make two lunges with its beak open. When we left it the pird was settling down with pand Number 19880 on its leg.

Who knows, it may be the first to come back and upset all my theories.